

SCOPE OF THE CLAIMS

1. An image encoding device which encodes images for each object, characterized by: encoding means which encodes an image on the bases of predetermined display speed information; and multiplexing means multiplexes said predetermined display speed information onto the encoded image signal encoded by said encoding means and outputs the multiplexed signal.

2. The image encoding device as claimed in claim 1, characterized in that the multiplexing means multiplexes the display speed information for each object.

3. An image decoding device which decodes an encoded bit stream formed by encoding an image for each object, characterized by: display speed information decoding means which decodes display speed information from said encoded bit stream; and control means which, based on the display speed information decoded by said display speed information decoding means, controls the reconstruction of the image processed for each object.

4. The image decoding device as claimed in claim 3, characterized in that the display speed information decoding means decodes the display speed information for each object.

5. The image decoding device as claimed in claim 3 or 4, characterized in that the control means is provided with: decoding time specifying means which specifies object decoding time on the basis of the decoded object display speed information decoded by the display speed information decoding means and object display speed information preset in the decoding device; and decoding means which performs object decoding on the basis of the object decoding time obtained by said decoding time specifying means.

6. An image encoding device which encodes an image for each object,

characterized by absolute time multiplexing means which multiplexes, for each object, information indicating absolute time for said object onto said encoded image signal.

7. An image decoding device which decodes an encoded bit stream formed by encoding an image for each object, characterized by: absolute time analysis means which analyzes, for each object, information indicating absolute time for said object; and control means which controls the reconstruction of an image processed for each object on the basis of the absolute time information analyzed by said absolute time analysis means.

8. An image encoding device which encodes an image for each object, characterized by time information encoding means for encoding first time information defining the time interval between a reference time and a display time and second time information defining the display time with higher accuracy than the time defined by said first time information, as information defining the display time of an image at each time for each object, and an image corresponding to each time, and wherein when the bit length of said first time information is longer than a predetermined set value, said time information encoding means repeats a bit shift of said set value until the bit length becomes shorter than said set value and counts the number of bit shifts and encodes said number of bit shifts and a bit string obtained by the repeated bit shifts.

9. An image encoding device which encodes an image for each object, characterized by time information encoding means for encoding first time information defining the time interval between a reference time and a display time and second time information defining the display time with higher accuracy than the time defined by said first time information, as information defining the display time of an image at each time for each object, and an image corresponding to each time, and wherein said time information encoding means has first time information holding

means for holding the first time information of an image encoded at immediately preceding time and calculates a bit string of the difference between the first time information of an image to be encoded and the first time information of the image at the immediately preceding time available from said first time information holding means and then encodes said difference bit string as the first time information of the image to be encoded.

10. An image decoding device which decodes a bit stream formed by encoding an image for each object, characterized by: time information decoding means for decoding first time information defining the time interval between a reference time and a display time and second time information defining the display time with higher accuracy than the time defined by said first time information, as information defining the display time of an image at each time for each object, and an image corresponding to each time; and decoding and synthesizing means for decoding input encoded image signals for each object and synthesizes these decoded image signals, and wherein said time information decoding means decodes, as encoded data of said first time information, the number of bit shifts and a bit string obtained by repeated bit shifts and decodes said first time information by adding a code of a length of a predetermined set value to said bit string by the number of bit shifts, and said decoding and synthesizing means synthesizes a decoded image signal on the basis of the first and second time information decoded by said time information decoding means.

11. An image decoding device which decodes a bit stream formed by encoding an image for each object, characterized by time information decoding means for decoding first time information defining the time interval between a reference time and a display time and second time information defining the display time with higher accuracy than the time defined by said first time information, as information defining the display time of an image at each time in an image series, and an image corresponding to

each time; and decoding and synthesizing means for decoding input encoded image signals for each object and synthesizes these decoded image signals, and wherein said time information decoding means holds the first time information of an immediately previously decoded image, then adds the first time information of the immediately previously decoded image from said first time information holding means to a bit string decoded as the first time information of an image to be decoded and decodes the first time information of the image to be decoded, and said decoding and synthesizing means synthesizes the decoded image signals on the basis of the first and second time information decoded by said time information decoding means.